



National Aeronautics and
Space Administration
Lyndon B. Johnson Space Center
Houston, Texas



Kid safe

JSC employees volunteer to improve the safety factor at the Child Care Center. Story on Page 3.



Checking it out

STS-82 astronauts check out hardware that will be used to berth the Hubble Space Telescope. Photo on Page 4.

Space News Roundup

Vol. 36

January 31, 1997

No. 5



George Abbey

Abbey to receive space trophy

JSC Director George Abbey will receive the prestigious National Space Trophy on March 6 during a special banquet at Space Center Houston. Astronaut John Young also will be honored for his lifetime dedication to the space program.

The National Space Trophy is given annually by the Rotary National Award for Space Achievement Foundation to one individual for outstanding leadership and personal commitment to space exploration. Nominations are submitted by leaders of the aerospace industry, government agencies, profes-

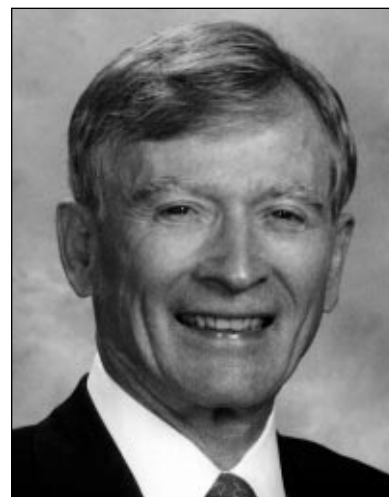
sional organizations and the media. A ballot of finalists is voted on by the Foundation's national board of advisers with confidential votes tabulated by an independent accounting firm.

Nominating Abbey for this year's honor, Robert Minor, president of the Space Systems Division of Boeing North America, cited "his exceptional vision, his superior leadership qualities, his unique and effective problem solving techniques and his broad understanding of technical management. His dedication and capabilities are truly

extraordinary and his major contributions to space exploration and the furtherance of the space program are legendary."

JSC Associate Director, Technical, John Young will be honored with the Corona Award.

The Corona Award recognizes a distinguished lifetime of achievement in the exploration of space and is made only when the Foundation board members feel that exceptional merit demands the special conferment. The Corona Award has been given once before
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John Young

Blaha calls Mir dockings turning point

Astronaut John Blaha is back after four months on orbit, calling the cooperative international program of shuttle-Mir dockings and residency "a turning point in world history."

Blaha arrived at Ellington Field on Jan. 23, along with all of his STS-81 crew mates except Jerry Linenger, who is now taking his place on Mir.

Commander Mike Baker, Pilot Brent Jett and Mission Specialists Marsha Ivins, John Grunsfeld and Jeff Wisoff joined Blaha in praising the integrated efforts required to make their missions successful.

"The idea that five, 10, 15 years ago we had two super powers who had nuclear missiles aimed at each other

and now we are cooperating the way we are, is absolutely incredible," Blaha said. "It is a turning point in world history and this Mir-shuttle program is an example of how you can work together with former enemies and do something fantastic. I think that is very healthy for the entire planet Earth."

JSC Acting Deputy Director Brian Duffy welcomed the astronauts home on behalf of JSC Director George Abbey, who sent his congratulations to the STS-81 crew and team "that went up and made the docking, bringing two spacecraft together and making it look easy."

Grunsfeld said that while it may have looked easy, the mission required a lot of dedication and effort. That it looked easy was a tribute to everyone at JSC, NASA and in Russia who worked hard to learn the lessons that will be extremely important to future cooperation.

"This mission included all the excitement of space shuttle missions but also all the romance of visiting a foreign country, and Mir is very much a foreign country in space," he said. "It was wonderful to share those experiences with the cosmonauts who have the same goals and ideals that we do of space exploration. I think all of us have taken away from this mission additional excitement as a result."

Commander Mike Baker called the flight "absolutely fabulous," and gave credit to "the world's greatest crew, the world's best training team, flight controllers both here and in Moscow and a fabulous Mir crew."

Jett applauded his family and friends who supported him through
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JSC Photo S81-014 by Mark Sowa

Astronaut John Blaha greets friends and family members who welcomed him home last week after his four-month stay on the Russian Mir Space Station. The STS-81 crew docked Atlantis to the Russian station, picked up Blaha and left Astronaut Jerry Linenger. Blaha returned to Earth with the STS-81 crew Jan. 12 after spending 128 days in space, 118 on Mir. During docked operations the cosmonauts and astronauts transferred more than 6,000 pounds of water, supplies and science equipment to the Russian station. Linenger will remain on Mir until May when replacement Mike Foale will lift off on STS-84 for his tour of duty on the Russian outpost.

Bridges becomes KSC's new director

Former shuttle astronaut and retired Air Force Maj. Gen. Roy Bridges, will be the new director of the Kennedy Space Center, effective March 2.

Bridges will succeed Jay Honeycutt, who announced his retirement last October.

"I am thrilled Roy is returning to the NASA team," NASA Administrator Daniel Goldin said. "Roy has a unique and very accomplished background that will be a tremendous asset in his new job as KSC director. He is the right person to take KSC into the next century."

As director, Bridges will be responsible for managing NASA's only site for processing and launch of the space shuttle vehicle at a

rate of seven to eight flights per year; processing of the payloads flown on both the shuttle and expendable launch vehicles; and overseeing of expendable launches carrying NASA payloads. He will manage a team of about 2,000 NASA civil servants and about 14,000 contractors.

As a NASA astronaut, Bridges served as pilot on STS-51F in 1985. The Spacelab 2 mission was a multidisciplinary mission with 13 investigations in seven scientific disciplines, including solar physics, atmospheric physics, plasma physics, high energy astrophysics, infrared astronomy, technology research and life sciences.

Discovery set to lift off on STS-82

By Ed Campion

The second servicing mission to the Hubble Space Telescope remains on track for a mid-February lift off from Launch Pad 39A at Kennedy Space Center.

NASA managers were scheduled to meet yesterday at KSC to conduct the formal readiness review of the mission and set the official launch date. The current STS-82 target launch date is Feb. 11 at 2:56 a.m. CST.

Major processing activities at KSC this past week included the installation of the payload into *Discovery's* cargo bay. Because of the extremely clean environment needed for the HST payloads, the installation activity was performed in an exceptionally deliberate and precise manner. Integration and verification tests of the payload are planned for this coming weekend. The astronauts were at KSC this week conducting a dress rehearsal of the launch countdown.

Assuming a launch on Feb. 11, the start of the official countdown will begin at 3 a.m. CST on Feb. 8 followed by the STS-82 crew's arrival at KSC around 7 a.m. CST.

Two days after launch, Commander Ken Bowersox and Pilot Scott Horowitz will guide *Discovery* to a rendezvous with the orbiting astronomical observatory. Mission Specialist Steve Hawley will then use the shuttle's mechanical arm to retrieve the telescope and lower it onto a work platform in the cargo bay. The next day will mark the first of four space walks to be conducted on four successive days. Astronauts Mark Lee, Greg Harbaugh, Joe Tanner and Steve Smith, working in pairs, will remove and replace various HST components.

Discovery's mission duration is planned for 9 days, 22 hours, 47 minutes. The second shuttle mission of the year will conclude with a landing at KSC on Feb. 21 at about 1:43 a.m. CST.



Linenger settles in, begins experiments

Astronaut Jerry Linenger began working with experiments this week as he settled in with Russian crewmates, Commander Valery Korzun and Flight Engineer Alexander Kaleri.

This week's activities included initial activation of the Biotechnology System, designed to support long-duration experiments in a low-gravity environment. Experiments to be conducted in the BTS are involved with tissue culture, protein crystal growth and fundamental biotechnology research. Facility checkout of the BTS will ensure that risk-free experiments can be conducted on the International Space Station.

The facility consists of six modules designed for easy changeout

to accommodate changing science requirements and advances made during the several year planned period of its operation.

After *Atlantis* undocked from Mir, the cosmonauts took a day off to relax and unpack some of the material transferred from the shuttle. Linenger told flight controllers that unpacking his many boxes of gear was like opening Christmas presents.

Linenger created quarters in the Spektr module and by Wednesday of the first week, the triathlete began his daily exercise regimen, which includes two

hours of running on a treadmill and riding on a stationary bicycle.

Linenger began work with some of the life sciences and medical investigations he will conduct during his stay on the orbiting facility. He also replaced radiation dosimeters that went back to Earth on *Atlantis* with new instruments that will continue measurements of radiation aboard Mir.

Linenger and some of his former STS-81 crewmates took samples from Mir's air, water and physical surfaces to check for microbes. The samples were returned to Earth on

the shuttle and will be compared with other samples taken periodically through the mission.

The harvest of wheat from the Greenhouse experiment occurred Jan. 17 during the docked phase of operations. The equipment was dismantled and stowed. Another crop will be grown after Linenger completes his tour.

Two instruments—the Mir Structural Dynamics Experiment and the Space Accelerations Measurement System—took measurements during the docking mission to help flight engineers better understand the dynamics of the 400,000-ton spacecraft created by the docking of the shuttle and Mir.

